

IN THE CLAIMS:

Please cancel claim 32 and amend claims 21, 33, 35 and 36 to read as follows:

1. - 20. (Canceled)

21. (Currently Amended) A safety method for aircraft comprising the steps of:

- marking prohibited airspaces, which controlled aircraft may not enter, on a digitally stored image of the airspace; and
- dividing the airspace into predetermined volume elements;
- calculating probabilities in which the aircraft will be situated in predetermined volume elements at a plurality of selected points in time (residence probabilities);
- calculating probabilities of the residence of the aircraft in each volume element (collision probabilities) of the predetermined volume elements for the selected points in time from the residence probabilities of the aircraft and from residence

probabilities of the volume elements of the prohibited  
airspace, the latter of which are set to one;

- calculating an alternative route if the collision  
probability exceeds a predetermined value for at least  
one volume element; and
- ~~when a controlled aircraft approaches a prohibited~~  
~~airspace,~~ automatically steering the aircraft on to an  
the alternative route which is situated outside the  
prohibited airspace by means of an automatic control  
device on board the aircraft.

22. (Previously Presented) A safety method according to claim 21, wherein the height of the prohibited airspace is greater than the height which can be reached by the controlled aircraft.

23. (Previously Presented) A safety method according to claim 21, further comprising the step of activating the automatic control device to steer the aircraft only after the input of a command, and permitting deactivation of the automatic control device only by a secure method which prevents unauthorized deactivation.

24. (Previously Presented) A safety method according to claim 21, wherein the automatic control device can only be deactivated by means of a device situated outside the aircraft.

25. (Previously Presented) A safety method according to claim 21, wherein the automatic control device can only be deactivated when the aircraft is on the ground.

26. (Previously Presented) A safety method according to claim 21, wherein the automatic control device includes means for automatically landing the aircraft.

27. (Previously Presented) A safety method according to claim 26, wherein the location of the automatic landing is predetermined by means of a device situated outside the aircraft.

28. (Previously Presented) A safety method according to claim 21, further comprising the step of taking over control of the aircraft on the alternative route by means of a device situated outside the aircraft.

29. (Previously Presented) A safety method according to claim 23, further comprising the step of sending a message to a device for air traffic control when the automatic control device is activated.

30. (Previously Presented) A safety method according to claim 21, further comprising the step of selecting an alternative route when the aircraft approaches a moveable object, thereby to avoid the movable object.

31. (Previously Presented) A safety method according to claim 21, further comprising the step of automatically steering the aircraft to an alternative route when it approaches other objects, including other aircraft.

32. (Canceled) .

33. (Currently Amended) A safety method according to claim 32 21, wherein a plurality of alternative routes, with a deviation which increases from alternative route to alternative route, are initially calculated according to recognized or established alternative rules, and wherein the calculated alternative route with the smallest deviation,

which results in a probability of entry into the prohibited airspace that is less than a predetermined threshold value is selected and is converted into a control command for said automatic control device.

34. (Previously Presented) A safety method according to claim 33, wherein, when a limiting deviation is reached without the probability of entry into the prohibited airspace being correspondingly reduced, alternative routes in another direction are calculated.

35. (Currently Amended) A safety method according to claim 32 21, wherein residence probabilities of other objects are additionally taken into consideration for the calculation of the alternative route.

36. (Currently Amended) A safety method according to claim 32 21, wherein, for volume elements which are situated in an edge region around the prohibited airspace, the residence probabilities are set to a lesser value than that of the prohibited airspace.

37. (Previously Presented) A safety method according claim 21, further comprising the step of emitting a warning signal for the pilot when the aircraft approaches a prohibited airspace.

38. (Previously Presented) A safety method according to claim 21, further comprising the step of emitting a warning signal for the pilot when the automatic control device takes over the automatic control of the aircraft.

39. (Previously Presented) A safety method according to claim 21, further comprising the step of displaying prohibited airspaces, and displaying the alternative routes which are calculated, on a display device, preferably a navigation display device.

40. (Previously Presented) A safety method according to claim 21, further comprising the step of displaying the airspace, the position of the aircraft in the airspace, and the alternative route, if any, on a display device.